ABSTRACT OF THE DISCLOSURE

An imaging optical system has a variable magnification optical system. The variable magnification optical system includes, in order from the object side, a first lens unit with positive refractive power, a second lens unit with positive refractive power, a third lens unit with negative refractive power, a fourth lens unit with positive refractive power, and an aperture stop interposed between the third lens unit and the fourth lens unit. The variable magnification optical system changes an imaging magnification while keeping an object-to-image distance constant. The imaging magnification is changed by varying spacing between the first lens unit and the second lens unit, spacing between the second lens unit and the third lens unit, and spacing between the third lens unit and the fourth lens unit. When the imaging magnification is changed, the imaging optical system satisfies the following conditions in at least one variable magnification state:

$$| En | / L > 0.4$$

$$| Ex | / | L / \beta | > 0.4$$

where En is a distance from a first lens surface on the object side of the variable magnification optical system to the entrance pupil of the imaging optical system, L is the object-to-image distance of the imaging optical system, Ex is a distance from the most image-side lens surface of the variable magnification optical system to the exit pupil of the imaging optical system, and β is the magnification of the entire system of the imaging optical system.